



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month. Its at 6:30PM at the Golden Corral Restaurant, 6129 Glenwood Ave., Raleigh.



PUBLIC SERVICE EVENTS

Interested in helping? Visit
<http://www.rars.org/public-service.php>

frequently for our 2016
ham public service
schedule.

RARS General Meeting

Topic: Antenna Modeling by Fred Benson, NC4FB.

Date: August 9, 2016

Time: Meeting at 7:30 p.m.

Informal gathering and refreshments from 7 - 7:30 p.m.

Where: Ridge Road Baptist Church. 2011 Ridge Rd., Raleigh
New HAM / Elmer meeting, 6:00 p.m. before member meeting

Tadd Torborg, KA2DEW, Elmer Coordinator

[Click here for more information.](#)

RARS President's Message

August, 2016

I think I can safely say that we are in the dog days of summer. For those operating NPOTA or other portable stations, and even for those merely relaxing on the beach, please remember to stay hydrated. Don't forget our next meeting on August 9th. The RARS VE team will again be offering exams for new licenses and upgrades. If you know someone interested in becoming a ham, now is a great time for them to obtain their first license. Or maybe you've been putting off testing for the General or Extra Class exam. Brush off those study guides and

[Continued on page 3](#)

RARS Officers

PRESIDENT

Dennis Keith
NC4DK
919-803-7973
NC4DK@yahoo.net

VICE PRESIDENT

Tom Lewis
N4TL
919-870-9342
N4TL2@yahoo.com

SECRETARY

Bob Chapman
NC1X
919-782-5778
NC1X@nc.rr.com

TREASURER

Greg Seamster
KE4PAX
919-859-0029
KE4PAX@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the third Friday of the preceding month. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: Second Tuesday of each month

Location: Ridge Road Baptist Church 2011
Ridge Road Raleigh, NC, 27607

Time: People begin arriving at 7 p.m. The meeting officially begins at 7:30 p.m.

RARS Monthly Dinner

All members and guests are welcome to the monthly (first Tuesday) RARS Supper, 6:30PM, at the Golden Corral Restaurant, 6129 Glenwood Ave., Raleigh. Informal and Dutch, just bring your appetite and best rag to chew. 73, Chuck, K4HF

RARS Repeaters in Raleigh

146.640 and 444.525

Join us for the nightly RARS net at 8 p.m. on the 146.640 repeater. All hams holding a Technician class license or higher are invited to check in. We welcome both RARS and non-RARS members to the net.

There is a net Listing on the RARS website click here. <http://www.rars.org/nets.php>

VE Testing

The RARS VEs will accept walk-in testing in February, May, August and November at 5:30PM, prior to RARS membership meetings at Ridge Road Baptist Church; the RARSfest in April; the Cary Swapfest in July; the JARS-Fest in November; and following RARS license classes. Please bring a photo ID, your original and a copy of your current license, your \$14 exam fee, and any valid CSCEs that prove passing elements beyond that of your current license. Visit www.rars.org for more information.

President's Message continued

join us on August 9th, at 5:00 pm, for the test session. It will be held in or near the same location of the new hams' meeting in the hallway to the left of the meeting room. Walk-ins are welcome. Please remember to bring a copy of your current license and/or any CSCE's you may have.

The first batch of RARS shirts has been delivered. Additional shirts are available through the RARS website. Work is also underway for a new RARS patch, which will hopefully be available soon.

It was good to see several RARS members in attendance at the Cary Mid-summer Swapfest on July 16th. Now it's time to make travel plans for those attending the Shelby Hamfest over Labor Day weekend. Every time I've been to Shelby I have always run into a bunch of folks from RARS. Thanks for supporting hamfests in the area, especially our own RARSfest, which is coming next spring, as the weather begins to warm up again.

73,
Dennis
NC4DK

RARS August Birthdays

Angi	KM4JPW	08/02
Lee	AK4XZ	08/05
Rebel	KM4JEG	08/05
Clement	KD4BMA	08/08
Buddy	KG4BBL	08/09
Andy	AA9P	08/10
Jeff	KM4JEF	08/10
Sharon	KM4JEZ	08/12
Manny	K4KBM	08/14
Christopher	KM4RNC	08/15
Paul	AE4MN	08/15
Jake	KM4TCH	08/16
Jay	KM4JPQ	08/17
Bernard	W4BRB	08/17
Mike	KM4BJV	08/18
Matt	KV4LM	08/18
David	WB8QYV	08/18
Bonnie	KK4OAK	08/19
Chuck	W3WZN	08/19
Elizabeth	KK4LND	08/19
Mike	KM4DER	08/20
Tom	KM4RMR	08/20
Al	KE4IHX	08/20
Red	AC4QX	08/21
Mirl	W4WMA	08/22
Barry	KD4WTI	08/22
Steve	KJ4BX	08/23
Jack	KI4YXK	08/24
Dick	AJ4UX	08/24
Daniel	KW4TI	08/24
Jason	KM4KRZ	08/25
Peter	KJ4MDY	08/25

RARS August Birthdays Continued

Don	N8DDK	08/27
Denny	W4DWC	08/27
Eric	KM4TXV	08/29
Mike	KK4ETS	08/30
Dan	KD4AGQ	08/31
Sarah	KJ4WZD	08/31

New Members

David Guthrie	WA4DAG
Dallin Cox	KM4RTL
Todd Nixon	K4NXT

Future Hamfests

A full list of Hamfests can be found at the [ARRL website](http://www.arrl.org).

08/13/2016 | [18th Annual Cape Fear ARS Swapfest](http://www.cafarsnc.org/)

Location: Fayetteville, NC

Type: ARRL Hamfest

Sponsor: Cape Fear Amateur Radio Society

Website: <http://www.cafarsnc.org/>

09/03/2016 | [North Carolina State Convention \(Shelby Hamfest\)](http://shelbyhamfest.org)

Location: Shelby, NC

Type: ARRL Convention

Sponsor: Shelby Amateur Radio Club

Website: <http://shelbyhamfest.org>

July 12 RARS meeting

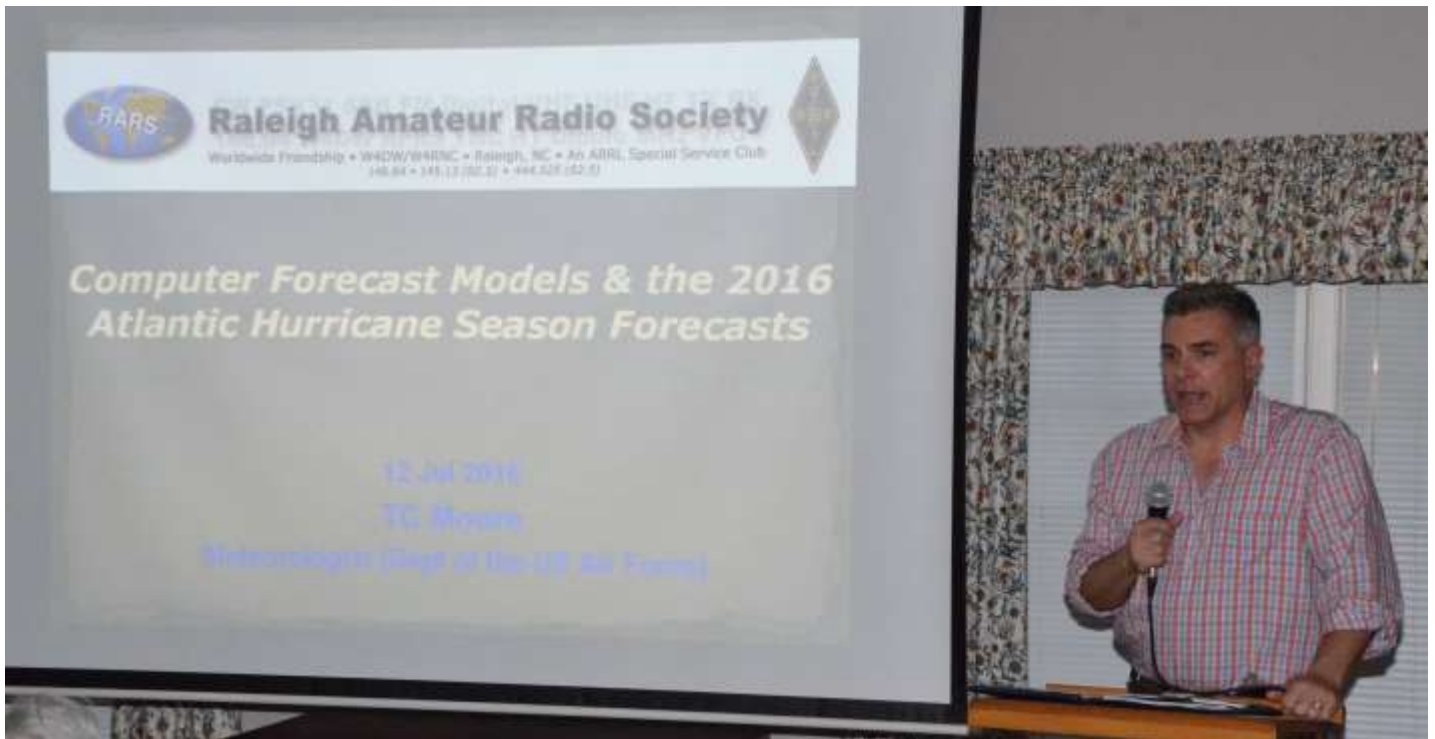


The Door Prizes were won by Josh KF4AXK (a Raspberry Pi book) and Daniel KW4TI, (a Handbook).



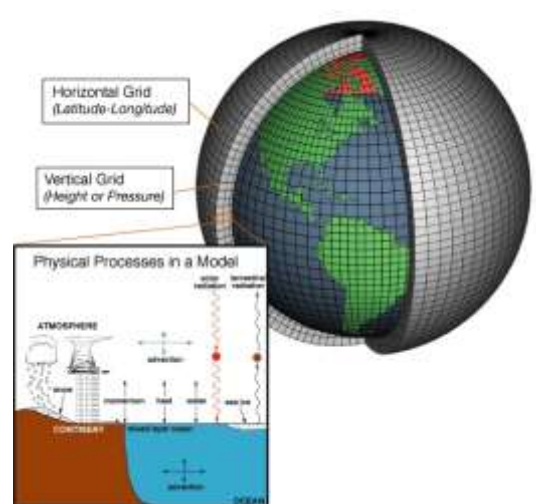
Dennis NC4DK presented a certificate of appreciation to Tadd Torberg, KA2DEW, Elmer Coordinator, recognizing his outstanding work with new hams.

July 12 RARS Meeting Presentation



LTC Thomas C (TC) Moore, USAF retired, Department of the Air Force meteorologist.

He presented "Computer Forecast Models and the
2016 Atlantic Hurricane Season Forecasts".



TC Moore and Jerry W2GLA. Jerry helped setup and schedule this presentation.

Education Director

The Technician Class course started Aug 6. General Class course will start Oct 1.

This year will end my tenure as Education Director (ED). The core of our license exam preparation courses is our instructors. Our philosophy is that we do not teach the test; we teach from the ARRL manuals with the goal to have safe and competent Amateur Radio Operators. We encourage questions as the session progresses, not later. We want the student to “get it.” Mike Murphy, WA4BPJ has been an instructor for years before I came along and has taught possibly 70 courses. He took it upon himself to add the General Class and Amateur Extra Class courses. A couple of years ago he taught two Technician, two General and an Extra course - that’s 23 Saturday mornings for 4 hours each day! Mike prepares his courses to cover everything in the manual that is on the exam and more. That means he goes thru every question and every detail in the manual to make sure it is covered in his presentations, but he never says, “This is a question in the question pool.” And that is done every time a new Question Pool comes out (every 4 years). Curt Phillips, W4CP, is a new instructor taking over the Technician Class course. His enthusiasm and innovation have put his stamp on the

courses that Mike created.

In the past four years I have developed a method to process the course list of potential students, announcements and registrations (the form is online and can be sent directly to the ED). The new ED will get all my files and I will teach what I do. I have written instructions. It does take a little time, but can be done from anywhere. With the team of Mike and Curt, the automated process and our “permanent” course location, the new ED will serve a valuable function of the Raleigh Amateur Radio Society by bringing it all together. The position will be available in January 2017 and is filled thru the nominating / election process that is used to fill the Board positions.

Club Shirts

Seeing blue at the RARS meetings? It’s not your eyes, it’s because a lot of the members are wearing the new club shirt. The Board took over a year to select a shirt of quality, had a pocket and our logo. The shirts are ordered on the RARS website and payment is made directly to the company. The shirts are reasonably priced and RARS makes no money on the sale of them.

73, Murray, K4MHM

Boy Scout Jamboree On The Air (JOTA)

JOTA is held the third weekend in Oct. This year that Saturday will be the 15th. Rob Cox, N4NM, is in charge this is a great event and an opportunity to have the scouts experience Amateur Radio and recruit new hams - last year we had 9 get their Technician license. Last year we had 4 RARS members and that was a stretch. Rob will need help. Let him know he can depend on you.

73, Murray, K4MHM

New Hams Meeting

The New Hams meeting is held every month before the regular RARs meeting. We'll try to start by 6pm. We try to address topics in a manner that will be of help to hams in their first year of operation.

Tadd Torborg, KA2DEW,
Elmer Coordinator
tadd@mac.com,
Raleigh NC FM05pv

QCWA Piedmont chapter 126

The next meeting of the chapter 126 of the Quarter Century Wireless Association will be held on Saturday, September 10, 2016 at the Best Food Cafeteria in Siler City, N. C. ALL members and guests are welcome!

Future RARS Presentations

8/9/2016	Antenna Modeling	Fred Benson, NC4FB
9/13/2016	Modern Methods to Learn the Morse Code	Dan Atchison, N3ND
10/11/2016	RARS Officers nominations RARS Auction	Election committee & TBD
11/8/2016	RARS Officers election and Show and Tell. Bring something of interest that you have built this year or previous years, maybe years ago. Be prepared to show it off and tell about it. The time will be limited so everyone can have time to show off their item.	Election committee & Members for Show and Tell
12/13/2016	RARS pot luck Holiday party. Sign up at the RARS website. RARS Officers induction.	Election committee

The New Hams meeting



In July our new-ham meeting included a talk by Tadd, KA2DEW, on antenna selection and performance for VHF operation. Various people brought in antennas including

- a quarter wave mag-mount antenna
- a 5/8 wave mag-mount antenna
- a home-made copper J-Pole for 2-meters
- a PAR Omni-Angle horizontal loop for 2-meters
- a 5 element Yagi for 2-meters
- a Hustler G6-144 2-meter collinear
- a Comet CX333 tri-band 2 meter/1.25meter/70cm (146/223/446) antenna
- a triplexer for the Comet antenna

We talked about gain figures, how antennas were advertised, what really matters in performance, and other interesting features and issues with these antennas.

Everybody at the meeting got a chance to handle the antennas, ask questions.

Continued on the next page

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After the antenna demo was over we broke up into a few smaller chat groups. Fin NC4FG brought his 2 port packet radio node in a really tiny wooden housing.

Tadd, KA2DEW,



Fin, NC4FG (on the right) discussing his 2 port packet radio node

Flying a Drone inside the Russian Woodpecker antenna.

Those of you who were on the air in the late 1970s and 1980s should remember the noise on the air due to Russian over the horizon radar. I copied this from Wikipedia.

Duga ([Russian](#): Дуга) was a [Soviet over-the-horizon](#) (OTH) radar system used as part of the Soviet [ABM](#) early-warning network. The system operated from July 1976 to December 1989. Two operational Duga radars were deployed, one near [Chernobyl](#) and [Chernihiv](#) in what was then called the [Ukrainian SSR](#) (present-day [Ukraine](#)), the other in eastern [Siberia](#).

This video on YouTube shows people flying drones in the antenna.

<https://www.youtube.com/watch?v=YhJpdCZNSDc>

Raleigh Amateur Radio Society
Board of Directors Meeting Minutes

June 21 , 2016

The board meeting was called to order by president Dennis NC4DK, at 7:20 p.m.

Present: Chuck K4HF, Dennis NC4DK, Ray NC4OO, Bob NC1X, Murray K4MHM, and Alan AB4OZ. This attendance did not constitute a quorum.

Approval of the Board minutes for May and the new budget were postponed due to the lack of a quorum

Vice President – not present

Treasurer – In the absence of Greg KE4PAX, a transmitted report is attached.

Secretary – no report

Directors:

Public Service – The next event is Firecracker event on July 4

Education – Murray K4MHM reported an extension in the currently running TECH class due to the holiday and work related delays. The GENERAL class is scheduled for the first week in October.

Public Information – The PIO Charles sent a file of contacts for Field Day.

Immediate Past President – Murray K4MHM requested that a new education director be found.

Directors at large (Bill, Ray, Marty) – no reports.

Other reports:

Scouting: JOTA activity will be headed up by Rob N4NM. There will be a University for Scouting at Wake Tech in November.

ARRL Liaison (Chuck, K4HF) – ARRL Field day is coming up. It's the next big League event on the calendar. The Roanoke Division convention will be at RARSfest next year on April 15, 2017.

Webmaster – Hank K4HM sent a report. He has made several updates to the main web page removing old content and adding items. The RARS T-shirt order form is added. Upcoming programs were updated. Other updates were made to the Board only page and the Nets page. He cannot find an appropriate photo gallery for the RARS albums so is writing his own. A preliminary version is at <http://www.rars.org/photos.php>

RARSfest: - no report

Field Day – Dennis NC4DK reports we are ready for Field Day at the Carroll farm. Maps are on the RARS website. Tents and porta-johns are ordered; supplies are arriving. Weather predictions look tolerable.

Old Business:

Club Brochures – Murray K4MHM has sent in the new edits, additions and amendments, but has received no response. We have enough Club Brochures for field day.

RARS Shirts – Thirteen shirts were ordered through Murray, and several members wore same at the June 14th General Meeting. To date there have been 25 orders. Henceforth they can be ordered from the RARS web page in the Members Only section.

Additional business:

The club has received its renewal for its AMSAT membership and has received a certificate attesting to that fact. The certificate is in the possession of the Secretary.

The Board Meeting was adjourned by Dennis NC4DK at 8:20 pm.

Respectfully submitted,
Robert E Chapman, NC1X
RARS Secretary

The 2017 Dayton Hamfest finds a new Home.

Greene County officials announced Monday that the annual Hamvention event will relocate to the fairgrounds in Xenia after the Hara Arena closes. Click on this link for more information.

<http://m.daytondailynews.com/news/news/officials-to-announce-big-event-coming-to-greene-c/nr77W/>

Introduction of Paperless QSLing (from the RSGB IOTA Website)

One of the first actions of Islands on the Air (IOTA) Ltd., the new managers of the programme, has been to expand the application routes on IOTA's existing software system to include Club Log QSO Matches. This is intended as the first step to the introduction of a much broader system of Paperless QSLing that is scheduled to be launched in the late Spring of 2017. Only a relatively small number of IOTA operations have been added at this time, mainly ones from islands which satisfy the criterion of one DXCC entity equals just one IOTA. This action was intended to provide a test run on how Club Log QSO matching would work in due course on the new IT system. Even so, modest as this approach is, more than 10,000 QSO matches were ob-

tained in the first week, and the first IOTA 100 Island applications have been received using this option exclusively. As with all new IT enhancements there were a number of bugs and queries raised which have now been resolved. Finally, to make use of this additional feature, sign in to the IOTA website and go to <https://www.rsgbiota.org/mycredits/> and click on Club Log QSO Matches. Bear in mind, this is not the full-blown system envisaged for introduction next year. We will expand the list of accepted operations over the coming weeks and months but, much as we would like to do more, it will be mainly in the area of recent operations from the rarer IOTA groups and, of course, ones that have uploaded logs to Club Log and indicated that they do not wish to delay or block IOTA QSO matching.

G3KMA, 10 Jul 2016

MINUTES

Raleigh Amateur Radio Society General Membership Meeting July 12, 2016

The meeting was called to order by president Dennis, NC4DK, at 7:32 p.m.

Dennis NC4DK presented a certificate of appreciation to Tadd Torberg, KA2DEW, Elmer Coordinator, recognizing his outstanding work with new hams.

There were 47 members present, which constituted a quorum.

Minutes for the June 14, 2016 meeting were approved as published in the Exciter.

Vice President: Tom N4TL announced that next month's program will be on antenna modeling, presented by Fred Benson, NC4FB.

Treasurer: (via E-mail) The club had 448 members last month, but now only 265 because the fiscal year expired and therefore a lot of memberships did also. President Dennis NC4DK requested the more than 165 laggards renew their membership as soon as possible.

Announcements:

RARS Dinner is every 1st Tuesday at 6:30 p.m. at the Golden Corral on Glenwood.

The next RARS Board Meeting will be Tuesday July 19, at 7:00 p.m. here in the church. All members are invited to attend.

The after-meeting gathering will be at the Applebee's at Gorman and Hillsboro streets.

Elmers meeting recap: Tadd KA2DEW said the subject today was antennas of all types and programming of HTs.

Committee Reports:

Continued on the next page

Public Service - check the RARS website for what is happening.

Education - Murray K4MHM (acting) - A General class starts in 2 weeks and an Extra class starts in October.

Field Day – Dennis NC4DK said Field Day was a success thanks to all who participated. Dennis held a drawing among those who attended. A book on Nikola Tesla was won by Murray K4MHM.

Dennis announced the passing of Charles Bodson, W4PWF. Karl W4CHX added comments.

FM Repeater - Karl W4CHX said all equipment on the ground is working. The 2 meter 13 machine at Bayleaf is working, but the antenna duplexes poorly. We may have to replace the hardline and get a commercial antenna. The 146.64 machine limps along. The Highway department now says we can move with them when they move the tower at the Vet school where the 64 machine resides. Nothing is in writing.

North Carolina QSO Party – Marty W4MY will have a meeting with South Carolina in 2 months.

At Large directors: no reports

Other Business:

Guests: TC Moore (speaker), Grady Perry (his driver), and KM4CMQ Tiia (sic).

ARRL: Gary KN4AQ says the Amateur radio Parity Act is up for a vote in committee tomorrow, July 13. It requires a reasonable accommodation of ham radio antennas in HOA controlled areas.

Ken KI4OTO announced that the estate of Jack Foster (SK) has donated cavities for our 2 meter repeaters.

Old Business:

Club Shirt Order - If you ordered a shirt Murray K4MHM has it. Future orders must be handled with the manufacturer. Hank K4HM put the order form on the website in the “Members Only” section.

Approval of Budget – The budget for next year was approved as presented last month.

Door Prizes were won by Daniel KW4TI, (Handbook) and Josh KF4AXK (Raspberry Pi).

Dennis NC4DK reminded the group that AES is going out of business July 28, and will be taken over by HRO.

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Program: Tom N4TL introduced Jerry W2GLA who introduced LTC Thomas C (TC) Moore, USAF retired, Department of the Air Force meteorologist, who presented on “Computer Forecast Models & the 2016 Atlantic Hurricane Season Forecasts”.

Math models of the atmosphere are used to predict future conditions based on the present conditions. All the equations are partial differentials which cannot be solved exactly (chaotic) hence inaccuracies are invariably present. Models are averaged into ensembles for 5 days out or more. The GFS Global Forecast System is issued 4 times daily. The European model is better but costs a lot to use. The Air Force uses the UK model.

Hurricane Predictions: Peak- Aug 15 – Oct 15, we will have an average season of 14 named storms, 6 hurricanes and 2 major hurricanes.

Why forecast considering uncertainties – to bring attention to the hurricane problem.

A Q&A period followed.

The meeting was adjourned by president Dennis NC4DK at 9:08

Respectfully submitted,
Robert E Chapman, NC1X
RARS Secretary

Amateur Radio Direction Finding Event

This item was received by email to the club.

The Backwoods Orienteering Klub (BOK) is hosting an ARDF (Amateur Radio Direction Finding) event on August 14, 2016 in the Raleigh-Durham area. We will have instruction and loaner equipment. Please notify any of your members who may be interested. More information on the event is at ARDF.US and BackwoodsOK.org. Please feel free to contact Joseph if you would like further information, Joseph@backwoodsok.org.

If anyone is interested please bring it up at the General meeting on August 9th.

Current Public Service Opportunities

To volunteer for a Public Service event please go to the RARS website and complete the form at the top of this page. <http://www.rars.org/public-service.php>

The Ham Public Service Net The HPS Net is on vacation, we will resume when the 2016 PS season begins. We will use the following repeaters in the Carolina 440 Link System:

441.725(+)(100) – Raleigh, NC Hub
443.450 (+)(100) – Cane Mt., Snow Camp, NC
444.325 (+)(100) – Holly Springs, NC
444.375 (+)(100) - Henderson, NC
444.550 (+)(100) – Coats, NC
444.775 (+)(100 – Cary, NC
444.875 (+)(100) – Wendell, NC
145.330 (-)(100) – Goldsboro, NC
442.250 (+)(107.2) - McCain/Southern Pines, NC
444.200 (+)(179.9) - Johnsonville, NC
444.025 (+)(100) - Benson, NC
442.425 (+)(100) - Buxton, NC

(The net is also accessible through IRLP Reflector 9210)

The Ham Public Service Yahoo Group link is: [Ham Public Service North Carolina](#)

Choose the event(s) for which you would like to volunteer and complete the sign-up form at the RARS website .. note... one form for EACH event that you are volunteering. We are glad you are back. <http://www.rars.org/public-service.php>

*** TO VOLUNTEER FOR ANY OF THESE EVENTS ON THE NEXT PAGE
FILL OUT THE FORM AT <http://www.rars.org/public-service.php>**

2016 NC TARWHEEL BIKEFEST

August 6, 2016 - Saturday - Hillsborough, NC

Scenic rural vistas along quiet country roads. Historic farmsteads and rustic churches. The pastoral heritage of the Piedmont. Make a difference.

Experience all this on the Carolina Tarwheels' BikeFest Rural Heritage Tour. Tarwheels donates all proceeds, in excess of expenses, to bicycling related activities in our community. Ham Volunteers are needed for SAGs, Rest Stop Monitors, Net Control

* Ham Coordinator: John (ai4rt)

* Location: 106 E. Margaret St., Hillsborough, NC 27278

* Event Website: [Bikefest](#)

* **TO VOLUNTEER FILL OUT THE FORM AT <http://www.rars.org/public-service.php>**

2016 BABYMOON PASTA RIDE

August 20, 2016 - Saturday - Raleigh, NC

Babymoon Cafe and d-Wise are thrilled to announced the 3rd annual pasta ride for MS where 100% of your registration fee goes to fight MS! The Ride is a premier fundraising event and all about a great personal challenge, anticipation, camaraderie, and the knowledge that you're changing lives... making every mile that much sweeter. We welcome riders of all levels to participate in this event. We need Ham Volunteers to provide communication and an additional layer of safety for the participants.

* Ham Coordinator: John (ai4rt)

* Location: d-Wise office, 1500 Perimeter Park Dr., Morrisville, NC 27560

* Event Website: [Babymoon](#)

* **TO VOLUNTEER FILL OUT THE FORM AT <http://www.rars.org/public-service.php>**

2016 FIVE-O RIDE

August 21, 2016 - Sunday - Raleigh, NC

Please check this link for our mission: [Five-O Mission](#)

We are pleased to be returning to bring you an exciting venue for our 7th annual Five-0 ride. There are 50k or 100k options; cycling the beautiful open roads of Northern Raleigh and Wake County. We need ham volunteers to operate SAGs, monitor rest stops and shadow event officials.

Ham Coordinator: John (ai4rt)

Public Service Continued from the previous page

Location: Life Time Athletic, 8515 Falls of Neuse Rd., Raleigh, NC 27615

Event Website: [Five-O](#)

* **TO VOLUNTEER FILL OUT THE FORM AT** <http://www.rars.org/public-service.php>

2016 MS BIKE RIDE

September 10 & 11, 2016 - Saturday & Sunday - New Bern, NC

* **TO VOLUNTEER FILL OUT THE FORM AT** <http://www.rars.org/public-service.php>

RARS Classified

The items below were listed within the last 30 days on the
RARS website classifieds section.

Mic's For sale

Posted July 20th, 2016 by: WZ0Q
Contact: wz0q@outlook.com

Five microphones for sale:

1-Uniden mic, 4 pin round connector. \$15.00
1-Radioshack/Realistic HTX-10 mic. \$20.00 or OBO.
1-Icom HM 46 Speakermic. \$20.00.
2- Azden hand mic's \$10.00 each, both have dtmf keypads.
Or make offer on all.
984-200-4531
Dennis, wz0q

Complete HF Station

Posted July 20th, 2016 by: W4ZWA
Contact: zackalexander@w4zwa.com

DX Engineering Feedline Choke - \$60.00

Bird Model 43 wattmeter :

From the estate of K4AVC(SK)--

Bird Model 43 wattmeter. Good condition. UHF connections. No slugs! \$150.

Contact W4MBD (mcneillr@ec.rr.com) for more information.

Kenwood TL-922A HF KW linear amplifier:

From the estate of K4AVC(SK)--

Kenwood TL-922A HF KW linear amplifier. Carefully inspected, re-tubed (pair of 3-500z tubes) and tested. Full output. Presently located in Raleigh with Doug, K4DSP for your perusal. \$750.

Contact W4MBD (mcneillr@ec.rr.com) for more information.

ICOM OPC-598 cable for AT-180

Posted July 7th, 2016 by: KE4YEM

Contact: edepley@charter.net

New unused. \$35.00 \$10.00 Shipping.

Yaesu YF-115S-02 Filter.

Posted July 7th, 2016 by: KE4YEM

Contact: edepley@charter.net

Purchased new however sold the radio before installing. \$100.00 \$10.00 Shipping.

ICOM AT-180 Tuner

Posted July 7th, 2016 by: KE4YEM

Contact: edepley@charter.net

Tuner is in excellent condition. No known issues. Unit was working when removed from service. \$225.00 \$25.00 Shipping.

Yaesu FT411E hand held Radio with case extra battery, chargers and mic

Posted July 7th, 2016 by: KE4YEM

Contact: edepley@charter.net

411E is in working order with no known issues. Batteries will take a charge, however condition is unknown. All items are in excellent condition.

Extra items consist of extra battery, PA-6 DC car adapter, CCC-37 case, MH-34 DC-18B wall charger, NC29 desk charger.

\$125.00/Shipping \$30.00